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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/706,221	11/12/2003	Heiko Taxis	15111-000166	6314
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BLOOMFIELD HILLS, MI 48303				
EXAMINER				
STEPHEN, EMEM O				
ART UNIT		PAPER NUMBER		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/706,221

Applicant(s)

TAXIS, HEIKO

Examiner

EMEM STEPHEN

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 July 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-5 and 7-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1,3-5,7-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SI/22)
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless —(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 7-11, 15, and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by US Pat. No. 6,130,727 to Toyozumi.

Regarding claims 1, 8, and 15, Toyozumi discloses driver information system (on-vehicle unit1) comprising an operating device (center module 7) having at least two operational control units (optional module 9a-c) and a holding unit with a number of operational control slots (module loading section 29) each adapted to physically receive one of the operational control units(col. 5 lines 34-49), and a control device for validating control signals transmitted by the operational control units (col. 7 lines 55-65, col. 8 lines 14-15 and col. 8 lines 21-30), wherein said operational control units are interchangeably arranged in the slots of the holding device (col. 5 lines 4-5, removable incorporated optional modules 9, and col. 8 lines 7-20, the CPU recognizes no optional modules 9 inserted or optional modules 9 inserted into center module 7 in all possible

combinations), each of said operational control units comprises a transmitting unit for transmitting a control signal that contains identification information identifying the particular operational control unit (col. 8 line 22-30, individual keys 15a-b have assigned instructions required to activate the radio receiving unit 3 etc, col. 9 lines 15-20), and said control device is associated with a receiving unit in order to receive the control signals provided by the transmitting unit (col. 8 lines 31-45 and col. 8 lines 47-67, col. 9 lines 4-10, display represents instructions assigned to the input keys 15a-b).

Regarding claim 19, Toyozumi discloses driver information system (on-vehicle unit1) comprising an operating device (center module 7) having at least two operational control units (optional module 9a-c) and a holding unit with a number of operational control slots (module loading section 29) each adapted to physically receive one of the operational control units (col. 5 lines 34-49), and a control device for validating control signals transmitted by the operational control units (col. 7 lines 55-65, col. 8 lines 14-15 and col. 8 lines 21-30), wherein said operational control units are interchangeably arranged in the slots of the holding device (col. 5, lines 4-5, removable incorporated optional modules 9, and col. 8 lines 7-20, the CPU recognizes no optional modules 9 inserted or optional modules 9 inserted into center module 7 in all possible combinations), each of said operational control units comprises a transmitting unit for transmitting a control signal that contains identification information identifying the particular operational control unit (col. 8 line 22-30, individual keys 15a-b have assigned instructions required to activate the radio receiving unit 3 etc, col. 9 lines 15-20), and said control device is associated with a receiving unit in order to receive the control

signals provided by the transmitting unit (col. 8 lines 31-45 and col. 8 lines 47-67, col. 9 lines 4-10, display represents instructions assigned to the input keys 15a-b), and further wherein the data connection by which said control signals are transmitted between each operational (see fig. 12, col. 6 lines 5—60, and col. 11 line 53-col. 12 line 3, each of the module loading section 29 comprise detection switch that detect presence or absence of module 9 and turns on, the central control 17 detects insertion of module 9).

Regarding claim 7, Toyozumi discloses the driver information system according to claim 1, however fails to disclose wherein each operational unit comprises at least one frame connector which is insert-able in an edge-socket-connector provided in each said operational control slot (see fig. 7, col. 5 lines 56-63, and col. 6 lines 60-65, male connector 45, receiving connector 36), the control signals being transmitted by wire via said connector-socket connection(col. 5 lines 61-63).

Regarding claim 9, Toyozumi discloses the driver information system of claim 1, wherein each operational control unit comprises a mounting member provided at a operational control unit slot and engaging said mounting member detachably (col. 5 lines 57-60, i.e. guide rails 31 and 33).

Regarding claim 10, Toyozumi discloses the driver information system of claim 1; wherein said operation control unit is one of an operating element, volume control element, a hard-key element etc (see fig. 1, col. 5 lines 6-8).

Regarding claim 11, Toyozumi discloses the driver information system of claim 1; wherein operational control units comprise identical cover plate (see fig. 1, optional modules are identical).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claims 3-5, 12-14, 16-18, and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Toyozumi in view of US Pat. 5946120 to Chen, and further in view of US Pub. No. 20030080619 A1 to Bray et al.

Regarding claims 3-5, Toyozumi discloses the driver information system of claim 1, however, fails to disclose wherein the transmitting unit transmits said control signals optically to the receiving unit.

Chen discloses wherein the transmitting unit transmits said control signals optically to the receiving unit (col. 2 lines 14-26),

wherein the receiving unit transmits said control signals via radio frequency to the receiving unit (col. 3 lines 5-6, 20-29).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Bray output controlling an input device for the purpose of optically illustrating the information concerning the operation of the motor vehicle.

However, Chen fails to disclose wherein said transmitting unit and said receiving unit are adapted for transmitting using the Bluetooth protocol.

Bray discloses wherein said transmitting unit and said receiving unit are adapted for transmitting using the Bluetooth protocol (pars. 25-26).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Chen such that the transmitting unit and said receiving unit are adapted for transmitting using the Bluetooth protocol for the purpose of using the Bluetooth protocol for the information communication for convenience to the user as the protocol is well known for short range communication.

Regarding claims 12-14, Toyozumi discloses driver information system (on-vehicle unit1) comprising an operating device (center module 7) having at least two operational control units (optional module 9a-c) and a holding unit with a number of operational control slots (module loading section 29) each adapted to physically receive one of the operational control units(col. 5 lines 34-49), and a control device for validating control signals transmitted by the operational control units (col. 7 lines 55-65, col. 8 lines 14-15 and col. 8 lines 21-30), wherein said operational control units are interchangeably arranged in the slots of the holding device (col. 5 lines 4-5, removable

incorporated optional modules 9, and col. 8 lines 7-20, the CPU recognizes no optional modules 9 inserted or optional modules 9 inserted into center module 7 in all possible combinations), each of said operational control units comprises a transmitting unit for transmitting a control signal that contains identification information identifying the particular operational control unit (col. 8 line 22-30, individual keys 15a-b have assigned instructions required to activate the radio receiving unit 3 etc, col. 9 lines 15-20), and said control device is associated with a receiving unit in order to receive the control signals provided by the transmitting unit (col. 8 lines 31-45 and col. 8 lines 47-67, col. 9 lines 4-10, display represents instructions assigned to the input keys 15a-b).

However, Toyozumi fails to disclose operational control unit comprises a transmitting unit for transmitting said control signals wirelessly, by radio frequency, and optically.

Chen discloses wherein the transmitting unit transmits said control signals optically to the receiving unit (col. 2 lines 14-26),

wherein the receiving unit transmits said control signals via radio frequency to the receiving unit (col. 3 lines 5-6, 20-29).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Bray output controlling an input device for the purpose of optically illustrating the information concerning the operation of the motor vehicle.

However, Chen fails to disclose wherein said transmitting unit and said receiving unit are adapted for transmitting using the Bluetooth protocol.

Bray discloses wherein said transmitting unit and said receiving unit are adapted for transmitting using the Bluetooth protocol (pars. 25-26).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Chen such that the transmitting unit and said receiving unit are adapted for transmitting using the Bluetooth protocol for the purpose of using the Bluetooth protocol for the information communication for convenience to the user as the protocol is well known for short range communication.

Regarding claims 16-18, the combination of Toyozumi, Chen, and Bray discloses the driver information system of claim 12, wherein said control signals include identification information identifying each of the operational control units to enable the control device to assign the control signals to the respective transmitting operational control unit (Toyozumi col. 8 line 22-30, individual keys 15a-b have assigned instructions required to activate the radio receiving unit 3 etc, col. 9 lines 15-20).

Regarding claims 20-22, the combination of Toyozumi, Chen, and Bray discloses the driver information system of claim 16, wherein the data connection by which said control signals are transmitted between each operational control unit and said receiving unit is configured the same for each operational control unit (Toyozumi see fig. 12, col. 6 lines 58-60, and col. 11 line 53-col. 12 line 3, each of the module loading section 29 comprise detection switch that detect presence or absence of module 9 and turns on, the central control 17 detects insertion of module 9).

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

US Pat. 555502 to Opeal

US Pub. 20070198137 to Wille et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to EMEM STEPHEN whose telephone number is 571 272 8129. The examiner can normally be reached on 8-5 Mon-Fri..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Appiah can be reached on 571 272 7904. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>.

Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/E. S./
Examiner, Art Unit 2617

/Charles N. Appiah/
Supervisory Patent Examiner, Art Unit 2617